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| Notice of Allowability | Application No. | Applicant(s) | |
| | 10/683,785 | JUAN ET AL. | |
| | Examiner | Art Unit | |
| | Lamson D. Nguyen | 2861 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. ☒ This communication is responsive to Amendment dated 08/22/05.
- 2. ☒ The allowed claim(s) is/are 1-24.
- 3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>03/08/05 and 10/10</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

- The primary reason for allowance for claims 1-10 is the inclusion of a color printer comprising a plurality of similar first encoding marks arranged on a conveyor, sensor arrangements associated with print stations, responsive to the first encoding marks and arranged to generate signals providing information about the movement of the conveyor with respect to the corresponding print station, at least one index marking indicative of a reference position of the conveyor, wherein the sensor arrangements are arranged to generate a signal responsive to the index marking, thereby providing information about the reference position of the conveyor with respect to the print station. It is these limitations, either alone or combined as claimed, that have not been taught, found, or suggested by prior art.
- The primary reason for allowance for claims 11-16 is the inclusion of a color printer comprising a plurality of second encoding marks inclined to the first encoding marks, wherein the sensor arrangements are arranged to generate second signals from the second encoding marks, wherein the first and second signals are related and their relation bears information about a conveyor displacement in a lateral direction with

respect to the corresponding print station. It is these limitations, either alone or combined as claimed, that have not been taught, found, or suggested by prior art.

- The primary reason for allowance for claims 17-19 is the inclusion of a method of printing images comprising the steps of starting to print an image, by a first print station, and recording a corresponding encoding mark count of the first print station, starting to print an image, by a subsequent print station in response to equality of the subsequent print station's encoding mark count and the recorded first print station's encoding mark count. It is these limitations, either alone or combined as claimed, that have not been taught, found, or suggested by prior art.
- The primary reason for allowance for claims 20-21 is the inclusion of a method of printing images comprising the steps of calibrating the distance between print stations with reference to encoding marks by moving the conveyor and detecting at least one index marking, when moved past the print stations, while detecting the corresponding encoding marks, moving the conveyor to print images while detecting the encoding marks at each print station, so as to obtain printing-station-

related movement information. It is these steps, either alone or combined as claimed, that have not been taught, found, or suggested by prior art.

- The primary reason for allowance for claims 22-24 is the inclusion of a method of printing images comprising the step of moving the conveyor to print images on a recording medium while detecting the first and second encoding marks at each print station, wherein detection signals of the first and second encoding marks are related and their relation bears information about a relative conveyor displacement with respect to the corresponding print station, so as to obtain printing-station-related movement and lateral-displacement information. It is these steps, either alone or combined as claimed, that have not been taught, found, or suggested by prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- Claramunt et al. (US 2005/0185009) teach a printer arranged to repeatedly, within one image, register raster lines of the image of the second print station to corresponding raster lines of the image of the first print station in response to correspondences found between the first and second surface recording.
- Ferran et al. (US 2005/0078015) teach an encoding system having a sequence of encoder marks forming incremental patterns and at least one index pattern.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamson D. Nguyen whose telephone number is 571-272-2259. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Talbott can be reached on 571-272-1934. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2861

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAMSON NGUYEN
PRIMARY EXAMINER
10/21/05